ABSTRACT

An output compensating device of an image sensor using a number of light–sensor circuits, each of which represents a unit pixel and works by producing in a photoelectric converting element a sensor current proportional to a quantity of light falling thereon, converting the current into a voltage signal by using sub–threshold region characteristic of a transistor having a logarithmic output characteristic in a weak inverse state, which enables the image sensor to compensate for variations in each pixel output by using a sensor signal obtainable when changing a gate voltage and drain voltage of the transistor with shut–off light falling on the photoelectric converting element to a value lower than normal voltages of the transistor for taking video. This enables the image sensor to easily compensate for variations in output characteristics of respective light sensor circuits in a pseudo output state created therein with no actual light falling thereon.